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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,443	07/01/2005	Antonio Luiz Duarte Braganca	0315-0158PUSI	7833
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BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER PASTERCZYK, JAMES W				
ART UNIT		PAPER NUMBER		

1755

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/518,443

Applicant(s)

BRAGANCA ET AL.

Examiner

J. Pasterczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/20/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/20/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

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1. The abstract of the disclosure is objected to because it lacks the steps of the claimed method but refers to the purported merits of the invention. Correction is required. See MPEP § 608.01(b).

2. The drawings are objected to because figure 2 appears to be merely a prior art reactor and thus should be labeled "Prior Art". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. Claims 1, 11, 12, 15, 33, 34, 39, 40, 43 and 44 are objected to because of the following informalities: in claim 44, last line change "to be" to --being--; likewise with claim 43, second line. In claim 40, l. 2, insert --the-- before "mass ratio". In claim 39 insert a space after "claim 36". In claims 33 and 34 change "is" to --are--. In claim 15, fourth line from the end, acetyl chloride is singular, and the  $\text{HCCl}_3$  is the same as the chloroform of the second line

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from the end. In claim 12, second line, insert --a-- after “is” since the following compounds are generic, not specific. In claim 11, last line, delete “comprised”. In claim 1, step (d), change “on” to --in--. Appropriate correction is required.

4. Claims 1-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, although the third line recites the presence of chlorine in the solid catalyst component, none of the steps requires the addition of a chlorine-containing compound, hence it is unclear how the chlorine comes to be in the catalyst. In step (c), second and third lines, insert --the group consisting of-- after “selected from” for closed Markush language. Steps d and g should recite that a solid is made in order to give the following steps antecedent basis for the solids recited therein.

In claim 12 “Grignard compounds” is somewhat generic and has the characteristics of a trademark, thus “Grignard” should be deleted. R and X are undefined, and metal aryls are not necessarily reducing agents as metal alkyls generally are.

In claim 13, third line, the subscript n in the first formula is undefined and it appears as if the two following compounds must be cyclo compounds though this is not clearly recited.

In claim 15, third line from the end, it is not clear which sulfur chloride is meant since there are several compounds having only those elements.

In claim 19, “the two different organometallic compounds” lacks antecedent basis. This is also found in claims 20 and 21.

In claim 23 it is not clear if the inert organic solvent referred to is that of step a or b.

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In claims 26-31, 33 and 35 insert --component-- after “solid catalyst” for proper antecedent basis.

Claim 36 provides for the use of a catalyst, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 36-47 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

In claims 38 and 39 “the cocatalyst used” lacks antecedent basis.

In claim 40 “cocatalyst” lacks antecedent basis.

In claim 41 insert --into a reactor-- after “is fed”.

In claims 42-44 “the polymerization reactor” lacks antecedent basis.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani et al., EP 0 480 435 (hereafter referred to as Luciani I).

Luciani I discloses the invention substantially as claimed (p. 2, l. 25-44; examples).

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Luciani I lacks disclosure of the thermal treatment of step (g) and the washing step (h) as well as various preferred embodiments of the present dependent claims.

However, washing is a conventional trivial step in order to remove excess reagents, and the “thermal treatment” is so broad as to read on merely letting a composition sit at room temperature.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Luciani I with a reasonable expectation of obtaining a highly-useful method of making a catalyst component with the expected benefit of the catalyst to be usable in gas phase polymerization processes.

7. Claims 1-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luciani et al., EP 0 522 651 (hereafter referred to as Luciani II).

Luciani II discloses the invention substantially as claimed (p. 2, l. 27 to p. 3, l. 35; examples).

Luciani II lacks disclosure of the thermal treatment of step (g) and the washing step (h) as well as various preferred embodiments of the present dependent claims.

However, washing is a conventional trivial step in order to remove excess reagents, and the “thermal treatment” is so broad as to read on merely letting a composition sit at room temperature.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Luciani II with a reasonable expectation of obtaining a highly-useful method of making a catalyst component with the expected benefit of the catalyst to be usable in gas phase polymerization processes.

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8. Claims 1-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 91/08239 (hereafter referred to as Neste).

Neste discloses the invention substantially as claimed (p. 7, l. 8-16; examples 1-13).

Neste lacks disclosure of the thermal treatment and washing steps of (g) and (h) respectively.

However, such steps are conventional in chemical synthesis.

It would have been obvious to one of ordinary skill in the art to apply that skill to the disclosure of Neste with a reasonable expectation of obtaining a highly-useful method of making a catalyst component with the expected benefit of the catalyst to be usable in gas phase polymerization processes.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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J. Pasterczyk

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5/30/06



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SUPERVISORY PATENT EXAMINER